

ESTABLISHED IN 1861 THE AMERICAN OLDEST BEE PAPER IN AMERICA

# BEE JOURNAL

GEORGE W. YORK, Editor. DEVOTED EXCLUSIVELY TO BEE-CULTURE. Weekly, \$1.00 a Year. Sample Free.

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**The Colorado State Bee-Keepers' Association** will meet on Jan. 16th and 17th, 1893, instead of Jan. 18th and 19th, as before announced. Those who expect to attend the meeting will please remember this slight change of time, which Mr. H. Knight, the Secretary, asks us to announce.

**The Illinois State Bee-Keepers' Convention** "call" is received, and reads as follows:

HAMILTON, Ills., Dec. 2, 1892.

The Illinois State Bee-Keepers' Association will meet in Springfield on the 14th and 15th of this month. We hope all the friends of the bee will make it a point to attend this meeting. Illinois is one of the best honey-producing States in the Union, and should have a bee-keepers' association second to no other State society of this kind in the United States. We trust the leading bee-keepers of the State will meet with us, and we also extend a cordial invitation to our friends from other States. Many matters of importance are to be discussed. All bee-keepers are cordially invited.

J. M. HAMBAUGH.  
C. P. DADANT.

**Don't Fail** to read all of page 749.

**Bee-Keepers' Terms.**—A new dictionary of the English language is now being prepared for publication, called the "Standard," and our good friend Dr. C. C. Miller has wisely been selected to edit the part referring to the words or terms used in bee-keeping. This will insure correctness at least in the portion of the dictionary treating of anything relating to our pursuit.

Dr. M. wrote us as follows about it requesting that all bee-keepers who are able to do so, should aid him in this work:

MARENGO, Ills., Nov. 29, 1892.

FRIEND YORK:—A new dictionary called the "Standard" is about to be issued. It is supposed to be an advance on Webster. All doubtless know that bee-keepers' terms are not in very good shape in existing dictionaries. Well, we have some chance in the coming dictionary, for the publishers have made me one of the special editors.

I would like to get hold of all bee-keepers' terms that are omitted in the dictionaries, or that need different definition. I will be obliged if you will send me any such, or if you will make a call in "the old reliable" for postal cards with such to be sent to me.

C. C. MILLER.

Now, let all who can help Dr. Miller, send to him whatever they think needs correction, or that should be added in this new dictionary.

**To Get Rid of Ants**, sprinkle the infested places with borax, and the ants will soon leave. So we have just read.

**Bees in an Attic.**—One of our correspondents sends in the following question, presumably for the "Query Department," but as it would be a month or two before its turn would come, and as one reply will likely be as satisfactory as a dozen or more in this case, we referred the question to Mr Green, whose answer follows immediately after the query, which is this:

Would you advise me to winter bees, which I have shut up in the hive by closing the entrance with wire-netting, in an attic where the temperature is from 50° to 60°?

BUZZER.

Bees should never be confined to the hive in winter. Even at times when they would not fly, the restraint seems to excite and annoy them, and they never winter well under such circumstances.

Bees can seldom be wintered successfully in a building above ground. The temperature named is too high, though it might do provided it would be perfectly uniform. The trouble is that in your attic the temperature would probably range from 80° down to zero, or lower.

J. A. GREEN.

**The Illinois State Convention.**—We have received the program of the fourth semi-annual meeting of the Illinois State Bee-Keepers' Association, to be held in the Senate Judiciary Room of the State House, at Springfield, Ills., on Dec. 14th and 15th, 1892.

Among the addresses, and subjects to be discussed, are the following:

"How to Advance the Interests of Bee-Culture."

Address of Welcome—Col. Charles F. Mills, Springfield.

President's Annual Address—by Hon. J. M. Hambaugh, Spring.

Essay (Subject of his own selection)—by P. J. England, Fancy Prairie.

"Do Bee-Keepers Need an Experiment Station?"—by Dr. C. C. Miller, Marengo.

Subject of his own selection—Chas. Becker, Pleasant Plains.

"Why Farmers and Horticulturists Should be Bee-Keepers"—by C. P. Dandant, Hamilton.

Subject of his own selection—by A. N. Draper, Upper Alton.

Remarks on "How to Improve Our Next Report."

It is earnestly hoped that there may be a good attendance of the bee-keepers of the State.

The following associations will be in session at the same time and place: Illinois Short-Horn Breeders' Association; Illinois Swine Breeders' Association; Illinois Sheep Breeders' Association; and the Illinois State Grange.

A rate of \$2.00 per day has been secured at the St. Nicholas Hotel. Delegates to the convention are requested to write to the proprietor of the hotel for accommodations, as long before the opening of the convention as possible.

The usual excursion rates on the principal roads are promised on the certificate plan, viz.: To return members at one-third rate, who have paid full fare *en route* to the convention.

If those who cannot attend the meeting will remit one dollar to the Secretary—James A. Stone, Bradfordton, Ills.—they will thereby become a member for one year, and be entitled to the report when printed—also to the report of 1892.

**The North American Bee-Keepers' Convention** at Washington, D. C., on Tuesday, Wednesday and Thursday, the 27th, 28th and 29th of this month, should be well attended. Many subjects of great importance to the industry of bee-keeping will come up for consideration, and will demand the most earnest thought of the best heads in the land. Will you be there?

Next week we will doubtless be able to publish the programme, which is to be a grand one. Look out for it.

**"Complete Guide for Caponizing,"** is the title of a pamphlet published by Geo. P. Pilling & Son, of 115 S. 11th St., Philadelphia, Pa.

**"Bees and Honey"**—page 749

### The World's Fair Exhibit

of bees has been discussed somewhat in these columns, and now Mr. A. G. Hill, in the *Bee-Keepers' Guide* for November offers the following suggestions about the manner of exhibiting bees at the Fair next year. Any others who have valuable ideas to offer regarding any portion of the apiarian exhibit, will doubtless be doing a favor to those who will have the matter in charge, by writing out their ideas for publication.

The suggestions and comments by Mr. Hill, referred to above, are contained in the following paragraphs:

It is our opinion that the only way to exhibit bees and make it at all convenient and educational is to use single-comb observatory hives, confining the bees as long as they are bright and healthy, and then change for a fresh comb and bees. We are not sure but wire-cloth would be better than glass, or perhaps glass on one side with wire-cloth on the other would be advisable during hot weather. The people could then see the queen, drones and workers, brood in all stages, eggs and pollen, while the experts accustomed to these sights could judge of quality by comparing the contents of different hives.

A good light will be of the greatest importance.

A lot of large observatory hives, arranged along the wall of a building in such a manner that the bees could pass through the wall and fly out over the heads of the people would hardly be satisfactory or safe. A colony of bees can easily and safely be taken away from their natural stand (away from home), and be opened up and exhibited in a crowd of people. But to place a lot of bees permanently, and bring the people up near or under them, would certainly be quite risky. Each colony would probably contain 40,000 workers, and there would be a number of colonies—bees enough, if they got mad, and wanted to do it, to take possession of the whole Fair, and run it to suit themselves. When a bee is mad and at home, or defending its home, it is not at all particular about distance, and might go a number of rods to sting some one. The safe way is to keep all the bees confined.

To show the quality and beauty of the light-colored bees, it would be nice to have the specimens confined between wire-cloth and glass with no comb at

all. By looking through the cages towards the light, the best kind of a view and test of color and markings could be had. No doubt all the queen-breeders in the United States, who breed especially good stock, would be glad to furnish a fresh sample by mail every ten days, or as often as it would be necessary to keep the bees bright and fresh, if some one was engaged to receive exhibits under the owner's name and care for the bees. Such a plan would be without expense to the Fair association.

**Getting Affidavits** from commission men "that they will not sell adulterated honey or beeswax, they knowing it to be such," was, by resolution, "recommended to the publishers of the various bee-papers," at the meeting of the Illinois State Bee-Keepers' Association in October. The report written for the *Canadian Bee Journal*, and published on page 249 of its issue for Nov. 15th, says in substance that the editor of the BEE JOURNAL was "present," and that he "promised to do his utmost in carrying out the spirit" of the resolution. With the slight exception that we were not "present" when the resolution was passed, and hence could not have "promised" anything regarding it, that part of the report is quite correct. We fully agree with Mr. J. A. Green on this subject, that "a firm that would adulterate honey would not hesitate to furnish a false affidavit." We cannot see how the obtaining of such affidavits would help any in stopping adulteration. What is needed is a national law against the crime of adulteration, and nothing short of that will do any good, in our estimation.

**Cleome.**—It is said that no other plant known to the civilized world will produce as much honey, of as good quality, as the *Cleome integrifolia*. It is a native of Colorado, hardy, and thrives on any kind of soil. The plant grows six feet high, and is covered with a mass of bloom from June until October, and is invaluable for bee-pasture.





### Field of Labor for Bee-Keepers.

In my opinion, the most promising field of labor is that of lessening the cost of honey. Honey is not a staple in the same sense that flour, meat and potatoes are. In proportion as prices of honey climb up, does the demand go down; and it is mostly in the devising of plans, methods, hives, appliances, etc., whereby the labor of producing honey may be lessened that bee-keepers must look at present for their success. The invention of the bee-escape was right in this line. Self-hivers are pointing in the same direction.

What is needed is to be able to place an apiary out here a few miles, another out in this direction, another in that, etc., and then have matters so arranged that one man can care for all of them. Or these same methods must allow a man to have an apiary at home, and be able to manage it by the use of a small part of his time, some other business taking the greater part of his time. I believe that it is in this direction that bee-keeping talent should turn its energies.—W. Z. HUTCHINSON, in the *Review*.

### Large Colonies Not Best for Winter.

While it may, and no doubt does, pay to have strong colonies in the North, it will not pay, as a rule, here in the South to winter strong colonies. Anything above an ordinary colony, or about half a gallon of bees, is wintered at a loss in the South, as a moderate swarm will build up sufficiently strong, long before the honey-flow. It is worse than useless to have a powerful colony. The late Judge Andrews, of McKinney, who is high authority on bees, has well said that it was better to burn your bees off in the fall rather than have them hang around idle all the fall and winter, using honey at a great loss to the owner. This I have found to be true in this country. We need the honey here, especially in the spring, but it is best

only to have a fair colony of bees, a good queen, and plenty of honey in Texas, or the Southern States.—Mrs. ATCHLEY, in the *Progressive Bee-Keeper*.

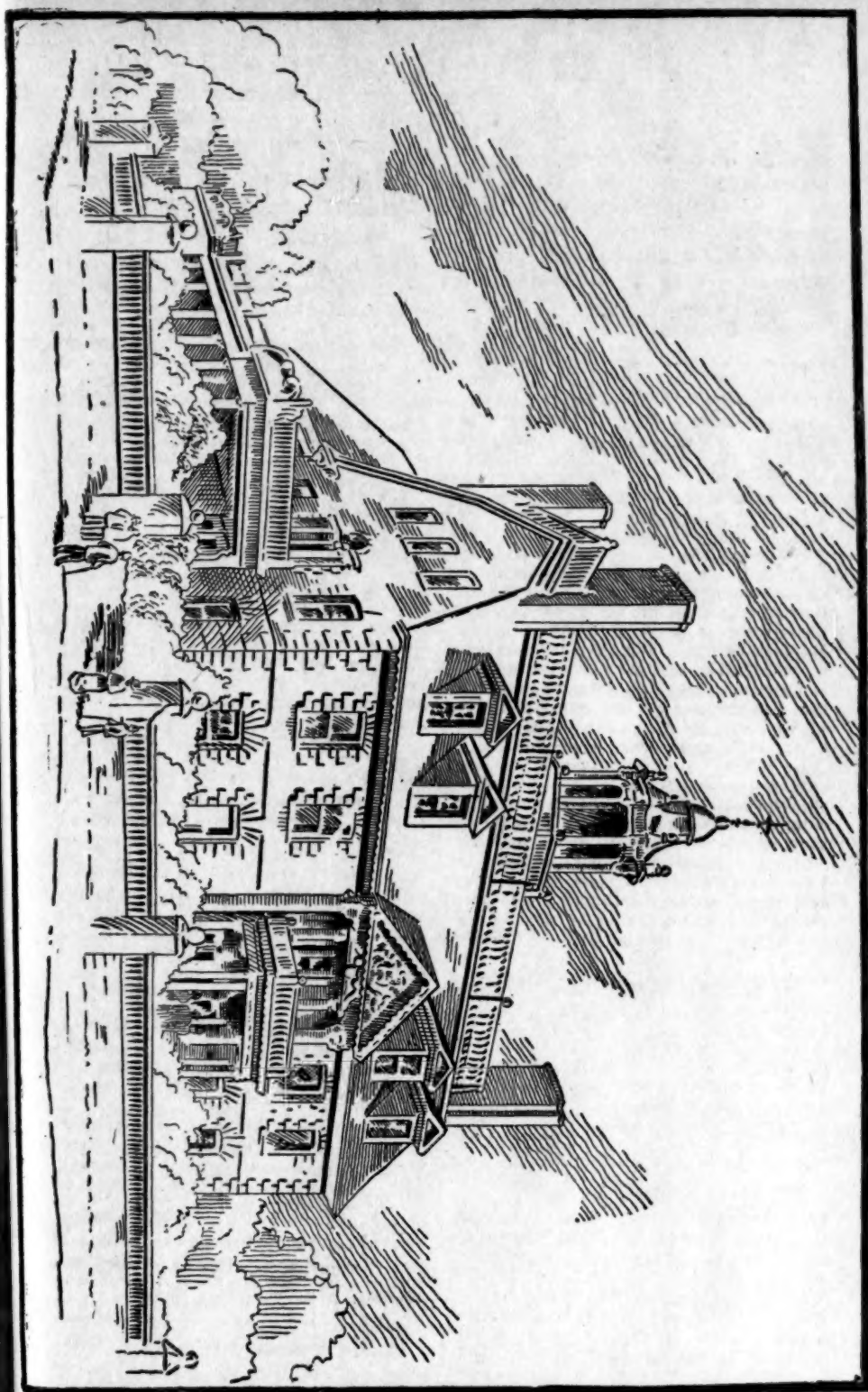
### Manitoba Honey.

It may yet be found that Manitoba is one of the best honey-producing countries in America, especially in wooded districts. The profusion of flowers that exists during the summer season, and the unrivalled bloom of the millions of wild-fruit trees, with the exceedingly long days of warm sunshine, make a condition of things favorable for bees. As an instance, Mr. Aitken, of Pilot Mound, who keeps a few colonies, had last season 120 pounds of honey from one colony, and the bees were last spring as vigorous as ever. Manitoba honey tastes very much like the honey gathered by bees from the blossoms of heather in the Highlands of Scotland.—*Pilot Mound Sentinel*.

**The Pennsylvania State Building** is shown opposite. During the past few months we have given quite a number of the State buildings that our readers will likely inspect closely next year. They afford quite a study in architecture for those who are interested in that branch of art. We have presented the pictures so that our readers might know in what building they would find the most friends and acquaintances, as naturally each one would be most interested in his or her own State building. Some of them are beautiful.

**The Ladies' Home Journal**, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the **BEE JOURNAL**—both Journals for one year—for \$1.60, to either old or new subscribers. If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year free; and the "Ladies' Home Journal" will begin with the January number.

**Great Premium on page 749!**



**The Golden Wedding** anniversary of Mr. and Mrs. Wm. B. McCormick, of Uniontown, Pa., was celebrated on Nov. 10, 1892, they having been married just 50 years on that date. Some 50 friends helped them to remember the occasion, and among the number of handsome and costly gifts were a gold watch and a beautiful Masonic charm. There was present Miss Sophia Gadd, who attended the wedding 50 years before, and who has bravely survived the importunate pleadings of many a would-be lover.

The local newspaper adds the following sketch of Mr. McCormick, who is among the host of admirers of the old AMERICAN BEE JOURNAL:

William B. McCormick was born near Smithfield, Aug. 25, 1821, and came to Uniontown with his parents in 1832. He was reared on his father's farm near Uniontown, and was educated at old Madison College. For 20 years he was a successful school-teacher in the schools of Fayette county. He was principal of the Uniontown schools from 1848 to 1860. His 71 years sit lightly upon him. He is as active as most men at 50.

He is engaged in a number of business enterprises, and is one of the principal stockholders of the Uniontown water company, of which company he is secretary. He is a high authority on bee-culture, which is a favorite pastime of his. Mrs. McCormick is a daughter of the late Matthew Allen, who served as sheriff of Fayette county for six years, having been elected in 1837 and again in 1850.

The BEE JOURNAL wishes to unite with the many friends of the happy "young couple" in the hope that they may be permitted to enjoy yet many years of purest happiness, even to the celebration of their "diamond wedding." So mote it be.

**Mr. H. Kohlenburgh**, who lives near Eddy, New Mexico, started last spring with 100 colonies of bees. Since then he has sold over 30 colonies, and received more than \$1,000 from honey. At least, so says a Colorado paper.



CONDUCTED BY

**Mrs. Jennie Atchley,**

FLOYD, HUNT CO., TEX.

### Can a Queen Produce Life Without the Aid of a Drone?

Dr. James Williams, of Farmersville, Tex., asks the following question:

"Does the queen-bee have the power to produce life without the aid of the male?"

Others ask from whence come the germs that fertilize drone eggs? All request me to answer and give my opinion in the AMERICAN BEE JOURNAL. With the help of a friend, I will do the best I can, for I do not think they will get a satisfactory answer from any one.

Now let us see. I believe it was Dr. McCosh, of Princeton, N. J., who said, "We must often be satisfied with facts alone, because science in a thousand things gives only the facts, but hides the reasons." Now that will be the harbor into which I may run at any time before closing this article.

Again, I have another fortification behind which we can all run for confession. It is metaphysical, it is true, but none the less real and true. Dr. Hamilton, of Scotland, author of the "Philosophy," to which I now make reference, says that "All thought is conditional." To prove this, he writes a long chapter. Now Pope means about the same thing when he says—"How can we reason but from what we know"—the mind is limited in its objects of thought. It cannot create anew.

We may use a horse for illustration. The head may be taken off and a cow's head put on; the tail may be removed, and that of a peacock put on in its place; we add the wings of a bird, the hide of an elephant, etc., but in all this the mind is conditioned or limited to objects of the senses—it can only work from what it knows. The mind is finite, and can only have finite conception. It is limited and conditioned to finite things. It is bounded all around by the infinite,



of which our finite powers cannot take cognizance. A finite mind can only have a finite conception. We know nothing of the infinite, because we can only measure the infinite by our finite measure, which is no measure at all.

Now please note that life has never been submitted to the senses. We do not know what it is. We cannot tell from whence it came, or whither it goes. This is a matter of faith, and not of knowledge. We believe many things we cannot know. We believe that life comes from God. We believe in God, also. We think that life is but a beam of his inconceivable self, aminating matters, as we call it, but we know nothing about it whatever. What we call life germs, sperms or spermatozoa, are but animals possessing the life we are considering, not life itself, which so far in science remains the uncondition, the unknown quantity, in our algebraic equation.

Let me give you a bit of physiological knowledge, which I have acquired through my senses—the only avenues to knowledge. Under the field of a good microscope of sufficient power, sperms are of different shapes and sizes. In the lomalia of a certain species they are shaped like the "wriggle-tail," as seen in stagnant water, like the embryo mosquito. Their motions are just like these embryo mosquitoes. They possess positive electric affinity for the ova of their kind and class. Placed within a certain distance of the ovum, a sperm heads about towards the ovum; pushed a little nearer, and it makes to the embrace of the ovum with an inherent force of its own. Some might suppose that they were dealing with life itself; but not so. As well move the elephant as a sperm. Life is hidden. It is one of the uncondition things which mind cannot grasp. It belongs to the infinite, and the infinite is unthinkable.

Now, dear friends, I hope this is matter for thought; anyway it must be matter for thought, though you may have thought it all over many times.

And now I come to your questions direct. I give you what I believe, and as all belief rests upon testimony of some kind and character, I will also add the ground work of my belief.

I believe that these sperms multiply and transmit their kind. Half is hidden. They are probably oviporous in a special sense. The cow and horse are as much oviporous as the hen. Only the cow hatches her eggs within her own body, while the hen does it outside. I believe the organizer of matter is their tangible

life force—the so-called "soul" in man—the gift of God, and that it has an expansive growth, too. We grow in spirit—this is a literal truth as well as a special one.

Now I believe these sperm ova pass to the mother and are retained by her (or by the queen, if you choose) for special use under an unknown law of the life force. I will illustrate by the known facts. Take, for instance, the corn aphids. There are seven generations in one summer. The first, second, third, fourth, fifth and sixth are all females. The seventh generation are male and female. The males have wings; the females have no wings. Now you see the influence of the male passes through seven generations. But how? Through sperm ova, transmitted from mother to mother, etc.

Can I strengthen this dogma? Yes, I believe I can give you a stool to sit upon while you take your breath. The bacteriologist takes a rabbit, dog, cat, etc., and introduces under the skin the spores of some of the bacteria known as consumption germs, etc. The animal sickens and ultimately dies, but often not until several broods of young rabbits come forth. Now these young rabbits transmit these obnoxious germs from generation to generation.

Again the human frame, or person, is made up of millions of cells, each one of which has the vital power of renewal, and that from day to day, and from year to year, through life. Now if a cell can beget a new cell for 70 or 80 years, and always under an established law of heredity, like producing like, then we must claim in this case some inherent right to life-giving powers. And why not one of our queens? That now is a nut for us all to crack.

Now, dear friends, please let me off, and if I had not disliked to have stolen Dr. Miller's short answer, I should have said to them, "I don't know." If any of you dear readers have any better way of answering this (to me) puzzling question, by all means let us have it, and I will be very thankful.

Our old readers will please excuse us for going over these old subjects, and take into consideration that we have a new crop of readers, and new bee-keepers that have never seen these matters talked upon. We will from time to time give all we know of bee-keeping, for the benefit of our beginners; and that is not much, for I am satisfied that none of us know it all, and probably never will. But all we can do in this line is to live and learn.



### Sowing Buckwheat for Honey— Will it Pay?

**Query 848.**—1. Would it pay to sow buckwheat for honey? 2. If so, how would it do to furnish my neighbors seed free, in order to increase the honey-acreage?—Ohio.

2. In some places it might pay well.—C. C. MILLER.

1. Not especially for honey, but for grain and honey, yes. 2. A good plan to try.—EUGENE SECOR.

It might pay in the latitude of Ohio, but not south of Tennessee or North Carolina.—J. P. H. BROWN.

This is a subject that will bear much discussion and thought. I am inclined to think it would pay well, in most localities.—W. M. BARNUM.

1. No. At least not here. 2. Buckwheat here does not furnish honey enough to pay for the seed.—R. L. TAYLOR.

1. Not here. 2. We used to do this, but find that knot-weed and Spanish-needle furnish better honey at the same date.—DADANT & SON.

2. It will not pay you to buy seed and give to another party; it is too uncertain a honey flora, and a slow seller when you get it.—H. D. CUTTING.

1. This is owing to location. Should there be an absence of honey-producing flowers, it might pay. 2. I am not sure on this point.—J. M. HANBAUGH.

1. Not for honey alone, but (2) it would probably pay you well to furnish seed to your neighbors. They furnish the land, and you get the honey.—A. B. MASON.

1. No; but why not also reap the buckwheat which is usually a paying crop? 2. That is a question I have never been able to settle satisfactorily.—C. H. DIBBERN.

1. In some States it pays to raise buckwheat for honey, but it does not pay in Ohio, except for the grain. Bees will work on it, but get little else than pollen.—G. L. TINKER.

1. Not for honey alone. In my locality I would just as soon not have any buckwheat planted. 2. I have doubts as to the advisability of offering any such inducements, as a rule.—JAMES A. GREEN.

1. Yes, it will pay if the bees work on it; but buckwheat does not secrete honey in all seasons. 2. Better sow on your own land, then if the honey fails, you will have the seed.—MRS. L. HARRISON.

1. I don't think it would; the field of nectar is so uncertain. 2. If it would pay at all, it would pay to furnish seed; but in my opinion it doesn't pay to sow seed especially for a honey crop.—J. E. POND.

1. Not in this locality. We have had a good buckwheat yield here this year, which is the first pound of buckwheat honey that has been produced in my apiary for the past 15 years.—G. M. DOOLITTLE.

1. Yes, if you have land, as the buckwheat will pay on its own hook; and then, if you have a favorable season, you will get honey beside, though not every year. 2. Won't pay. The honey yield is too uncertain.—A. J. COOK.

2. Yes, provided you can keep your neighbors from having the least suspicion that you want it growing for your bees. This you can't do. In most localities, such work increases bees and beekeepers faster than honey-resources.—JAMES HEDDON.

2. We sometimes furnish our neighbors with seed buckwheat, free; sometimes it pays, and at other times it does not. I would favor furnishing all that would sow within one mile of the bees, if they would not sow of their own furnishing.—E. FRANCE.

1. If you are so situated that by sowing at any particular time you could fill in a gap in the honey-flow, yes; providing you get the grain, too. 2. If you must depend upon artificial resources, perhaps buckwheat would pay as well as anything.—MRS. J. N. HEATER.

1. It depends upon how much buckwheat is in range of your bees, as to whether it will pay you. 2. It takes a world of flowers to give a flow of honey, and you would have to make a risky



investment, unless you should bargain to have your seed returned from the crops produced from the seed you furnish. In my locality, buckwheat fails to produce nectar some seasons like other fall honey-plants, and this is in the way.—G. W. DEMAREE.

1. Much depends. In a cool, moist season, in Indiana, buckwheat yields plentifully, though the honey is not first-class. In dry, hot seasons it amounts to nothing. As a rule, it will not pay to sow it for honey alone. 2. I think it would pay in fairly good seasons to give seed to neighbors.—M. MAHIN.

1. I don't think it will pay in Texas, as I have sowed buckwheat often, and at different seasons, and I have always found my bees would work on something they seem to love better. 2. From what I have read about buckwheat in Ohio and other Northern States, it might pay there. If I lived there, I should certainly try it, and if it paid, I would furnish my neighbors seed free.—MRS. JENNIE ATCHLEY.

### CONVENTION DIRECTORY.

#### *Time and place of meeting.*

1892.  
Dec. 13, 14.—Michigan, at Lansing, Mich.  
Geo. E. Hilton, Sec., Fremont, Mich.  
Dec. 14, 15.—Illinois, at Springfield, Ills.  
Jas. A. Stone, Sec., Bradfordton, Ills.  
Dec. 14, 15.—Eastern Iowa, at Maquoketa.  
Frank Coverdale, Sec., Welton, Iowa.  
Dec. 27-29.—North American, at Washington.  
W. Z. Hutchinson, Sec., Flint, Mich.  
Dec. 28, 29.—Vermont, at Burlington, Vt.  
H. W. Scott, Sec., Barre, Vt.  
1893.  
Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.  
Edwin Pike, Pres., Boscobel, Wis.  
Jan. 16, 17.—Colorado, at Denver, Colo.  
H. Knight, Sec., Littleton, Colo.  
Jan. 12-14.—Minnesota, at Minneapolis, Minn.  
A. K. Cooper, Sec., Winona, Minn.

**In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

**North American Bee-Keepers' Association**  
PRESIDENT—Eugene Secor, Forest City, Iowa.  
SECRETARY—W. Z. Hutchinson, Flint, Mich.

#### **National Bee-Keepers' Union.**

PRESIDENT—James Heddon, Dowagiac, Mich.  
SEC'Y AND MANAGER—T. G. Newman, Chicago.

**Read our great offer on page 749.**



### **How Far do Bees Fly? Ripening Honey, Drones, Etc.**

*Written for the American Bee Journal*  
BY G. W. DEMAREE.

During the honey-flow in October last, I had very favorable opportunities to judge correctly as to how far bees will fly under ordinary circumstances and gather a profitable return of honey.

My locality is a closely farmed section of the blue-grass country—and there is but little waste land to nourish wild flowers. In the month of October, all blooming plants have disappeared except the white asters; this plant blooms until hard frost cuts off all green growth.

East of my location about one mile, one of the tributaries of the Kentucky river takes its rise, and the country is cut into hills and water-courses, and attending waste lands, and here the white asters bloom as white as buckwheat fields. Onward from this point, say one mile in air-line from my apiary, and for many miles eastward, the aster fields are like great buckwheat fields, "white for the harvest." This harvest comes in October in our climate, and if the weather is good, the aster yields bountifully.

I have a friend that lives about six miles in air line from my location, and his apiary is located right in the center of these aster fields, and my apiary is on one side of them, and a mile from their outer lines. During good weather in October, I could follow my bees in their flight toward these aster fields as easily as if there had been one swarm after another traveling that way in quest of a home. Notwithstanding this busy work of my bees, I believe my friend's bees, located as they were right in the midst of the harvest fields, beat my bees at least 50 per cent. in the amount of honey stored from the asters.

These facts lead me to believe that from a central point, two miles or less,

in every direction, will cover a profitable field for an apiary.

The greater the light thrown on this subject, the greater is the evidence that bees do not work profitably at a great distance from their base of operation. If bees fly in quest of honey 3, 4, and even 7 miles, as some have reported, I am unable to account for the fact that my bees fell so much behind my friend's bees under the circumstances above related.

#### HONEY—THE PROCESS OF RIPENING.

Last season (1891) the weather was just right for the production of the very finest flavored honey, while this year (1892) was the very opposite. This year the humidity of the atmosphere has been abnormally excessive, and there has been no first-class honey secured this year (1892). Ought not this simple fact of *weather causes*, to settle the question concerning bees "digesting nectar" into honey? I have experimented carefully along this line, and I do not yield facts to "theory."

One of my repeated experiments to test this matter of ripening nectar must carry with it conclusive conviction, that the ripening process of perfect honey depends upon conditions outside of the bee's transporting sac. My experiment was conducted as follows:

Last year (1891) I was crowded for room, as the yield of nectar was rapid and abundant, and to keep the bees going I departed from my usual custom and took a great number of combs that were only partly sealed. These combs were first passed through the extracting process to remove all the unsealed honey, and this unsealed honey was put into a tank by itself—then the uncapping was done, and the honey from this source was put into another tank.

No experienced honey-producer could fail to discover a marked difference in the quality of these two lots of honey. That taken from the open cells was thinner than the other lot, and its flavor was not so distinct; and when granulation took place, when cold weather came on, the difference was still more remarkable. No close observer would have admitted (not knowing the facts) that the two lots of honey came from the same hives at the same time.

The honey that came from the open cells had a white, starchy appearance, and developed an undue amount of "glucose," no doubt brought about by the slower process of artificial evaporation. The past season the experiment was repeated with more marked results in the same direction.

It is a remarkable fact that the more rapidly nectar is gathered, the better the quality of the honey.

I think the secret of good, normal honey is locked up in good weather. Good weather makes good honey.

#### DRONES—PROGENY OF VIRGIN QUEENS.

Are they capable of propagating the race as potent male bees? This is the question pure and simple. If such drones are *sterile*—incapable of co-operating with the female in propagating their kind, then "parthenogenesis" is nothing but a fact that can have no other interest than ordinarily attaches to any other freak in nature.

No well-informed entomologist will doubt or deny "parthenogenesis" as he understands its true application to bees. But those sanguine authors who assert that the fertile male honey-bee descends from the mother-bee without the direct, or indirect, or recurring co-operation of the male, should not be surprised or offended if they are asked for the proof, since this is a matter that can be demonstrated by practical experiment. Let us have the proof before we are charged with "snorting at high criticism."

I have labored for years by practical, and practicable, experiment to prove that the progeny of the virgin queen is *fertile*. The climate of my locality is peculiarly suited to such experiments.

All that is necessary to a fair test of the "fatherless drones," is to keep over the winter some virgin queens, provide them with drone-combs so as to have the drones well developed in size; now rear some young queens so as to have them old enough to fly out to meet the males two or three weeks before drones are out from hives that have fertile queens. In my locality the experiment must take place between the first of March and the 10th or 15th of April. I have watched the young queens and the "fatherless drones" as they would take their flights in a most natural way, but all has been a failure, though the experiment has been repeated time and again. Not in a single case have I succeeded in having a young queen mated until drones were out from colonies having fertile queens.

To me the experiments were conclusive, but they might be repeated in some seclusive locality where no mistake could be made, and it is to be hoped that some capable person, favorably situated, will take up the experiment and prosecute it to an undisputed conclusion.

Christiansburg, Ky.

**Season of 1892—Bees in a Flood,  
Etc.***Written for the American Bee Journal*

BY W. J. DAVIS, 1ST.

DEAR OLD JOURNAL:—After six or seven years of almost honey famine, and when it began to look as though the keeping of bees must be abandoned, we have been favored again with a fair honey yield.

The season of 1891 was particularly bad in Northwestern Pennsylvania—but little honey, and that of poor quality—and as a consequence the spring of 1892 found many empty hives, some small bee-keepers losing every bee, and my own apiary reduced to about 50 colonies. Notwithstanding the almost constant rains during the whole month of May, the colonies left picked up wonderfully.

On the night of June 4th, an awful flood of water came pouring down the valley of the Brokenstraw river, destroying quite a number of colonies. My home apiary—the very cream of hundreds of colonies selected as the very best for seven years past—would all have been swept away, had I not, with the help of a neighbor, carried them to places of safety. With lanterns we waded the swiftly running and rising waters, and saved all but six.

At the same time that the Brokenstraw was overflowing all its banks, Oil Creek was carrying death and destruction on its mad waves, to the cities of Titusville and Oil City. The great loss of human life, as well as property, in the two cities mentioned, caused their calamities to be duly chronicled in the daily papers far and near, while the loss of \$100,000 to \$150,000 in property, in the valley of the Brokenstraw attracted but little attention, as no human lives were lost.

Sunday morning, June 5th, dawned bright and warm upon the earth. The locust, the blackberry, and the raspberry were beginning to open their nectar-yielding bloom, and the bees sallied forth to secure the tempting sweets; but, lo! my bee-garden was a different looking place from the day before. The waters still prevented the placing of the stands, many of which were piled against a picket fence. The only alternation was to shut some of the colonies in with wire-cloth, and others went to work and were allowed to remain five or six rods from their former location; so changed was everything that

they worked from their new location without loss.

From berry blossoms, clover, bass-wood and buckwheat, I have secured an average of about 40 pounds per colony, of comb honey, and an increase of 100 colonies, all heavy in stores of the best quality. So we are thankful that the dark clouds that have so long hung over our chosen pursuit, have shown their "silver lining," and we have some courage left to struggle on against adversities.

Long live the old, reliable AMERICAN BEE JOURNAL.

Youngsville, Pa., Nov. 16, 1892.

**Bees in California—Their Introduction; Harbison, et als.***Written for the American Bee Journal*

BY W. A. PRYAL.

A Californian can look back with a commendable degree of satisfaction upon the progress his State has made in apiculture. This industry is more recent in the Golden State than most of the other rural pursuits carried on there. We know that pure agriculture was introduced into California by the Roman Catholic missionaries some years before the Revolutionary Fathers thought of striking for American independence. These *padres* planted the vine, the olive, and other fruits, and even grains when the Pacific portion of our vast dominion was unthought of by the denizens of the Eastern part of the American continent.

But while the pioneers of Californian civilization and agriculture did so much to develop rural economy, they did nothing for apiculture which we can thank them for, for we have not heard that they brought the tolling bee with them when they planted the seed of those fruits which have since made California the most world-renowned fruit-land in the world.

As far as we can learn, the introduction of the honey-bee is due to a later period, and to secular enterprise. Therefore, while Californians have much to thank the aforesaid missionaries for, they also owe a big debt of gratitude to the men who caused the honey-bee to roam at will through its wonderfully fruitful valleys and balmy-laden hills and mountains.

As a branch of rural economy, apiculture can hardly be said to be second to none other in the State named. It will be unnecessary for me to dwell upon the



magnitude the business has obtained. It will be my purpose to rather review the past—the early history of bee-keeping in the modern land of “milk and honey.”

#### HARBISON'S LITERARY WORK.

There is before me a volume which has been out of print these many years. Its imprint shows that it was published in San Francisco, in 1861, thirty-one years ago. Its author was that prince of bee-keepers—J. S. Harbison—a man who, beyond doubt, has produced more honey in one year than any other single apiarist. Thirty-one years ago—nay, a score of years ago, he had not the reputation as a “bee-king” that he has since achieved—he was a simple apiarist on the banks of the sluggish Sacramento, a few miles below the capital. At that time he was, of course, one of the most prominent bee-men in the State—perhaps I should say the largest, for it is doubtful if there were any who owned more colonies than he did at this period. But in those times he did not count his bee-property by the thousands of colonies as he did a decade or so later.

Mr. J. S. Harbison deserves to rank with Mr. Moses Quinby and Rev. L. L. Langstroth, as an inventor and disseminator of apicultural literature. Not that his inventions were greater, or his book better, than those of both, but because they deserve a place alongside the others for paving a way to the solution of the “mysteries of bee-keeping.”

#### “THE BEE-KEEPERS' DIRECTORY.”

The book I mention is entitled, “The Bee-Keepers' Directory: or the Theory and Practice of Bee-Culture.” The title page further states that the work is based upon 18 years' personal study of the habits and instincts of the bee. It is well printed upon heavy book-paper, contains 440 pages and 80 illustrations, some of them being wood-cuts, and a few lithographs. To my mind, in point of number and excellence, its illustrations outrank those I have seen in any contemporary book on apiculture. The books of American authorship of any note antedating it, are those of Miner, Langstroth and Quinby.

The “Directory” is the first bee-book to give any extended notice of the Italian bee in this country. The chapter on this bee is accompanied with colored, life-like lithographies of a worker, queen and drone. The most interesting part of the chapter is that of the introduction of this bee into California. The correspondence there, as reproduced,

also throws light upon the first importation of Italian bees into this country.

A valuable letter, from an historical point of view, is given on page 384. It is in the nature of a communication from Mr. A. J. Biglow, of Sacramento, Calif., to the *California Culturist* of San Francisco. Mr. Biglow had gone East early in September, 1860, to satisfy himself whether the Italian bee was actually superior to the common bee. He writes from New York under date of the 28th of the month named. He says:

“I am fully satisfied that they [the Italians] are [better.] I find a greater difference between them and the common kind, in their appearance, than I expected. The Italians are truly beautiful to one who is an admirer of the industrious little insect. There are two or three parties who have imported the Italian bee from Europe; but, as far as I can learn, there are only two queens in this country that are direct from the mountains of Italy, where the black bee is not known; they are in the hands of Mr. S. B. Parsons, of Flushing, N. Y. I have procured a few queens of him, and shall use every effort in my power to try and get them through safely to California.”

Another letter of perhaps even greater importance is one from Mr. Biglow, after he had returned to his home. It was written on Dec. 29th, and sent to Mr. Harbison in reply to the latter's inquiry about the history of the importation of Italians to America; also as to Mr. B.'s experience with them. This letter covers over two pages of the “Bee-Keepers' Directory.” From it I extract the following, which I think will be interesting reading to all bee-keepers:

“Richard Colvin, of Baltimore, and Samuel Wagner, of York, Pa., have made several attempts to import these [Italian] bees, but had been unsuccessful until the autumn of 1859, when Mr. Colvin succeeded in getting a few colonies through safe; which, however, did not survive the winter.

“Next in order of date, is the importation of Mr. P. J. Mahan, of Philadelphia.

“In the spring of 1860, Mr. S. B. Parsons, of Flushing, L. I., succeeded in getting a few colonies alive direct from Italy.

“The last importation was by Messrs. Colvin and Wagner, sometime during the past season [1860]. Two of these importations are from Germany, and one from Italy.”

(Continued next week.)

## Wintering Bees—Description of a Bee-Hive.

*Written for the American Bee Journal*

BY A. E. JAMESON.

In order to describe my method of wintering bees, it will be necessary to give a description of the hive I use.

The bottom is made of  $\frac{1}{4}$ -inch lumber, nailed on cleats and grooved  $\frac{1}{4}$ -inch deep, and  $\frac{1}{8}$ -inch wide on the edges, and back end for the body to rest and slide on.

The body has a portico, and takes frames  $9\frac{1}{2} \times 17\frac{1}{2}$  inches, with a 20-inch top-bar, and bee-space above the frames, with a cover the same as is used on the dovetailed hive, flat top.

The supers are 21 inches long, and ends rabbeted so that two supers can be used with a set of brood-frames. Each end has a  $\frac{1}{8}$ -inch hole bored one inch from the top in the center, and screened on the inside. T tins cross  $1\frac{1}{2}$  inches from each end, on which section-holders rest, and are clamped with a "follower" and wedges. Section-holders of any width can be used. This super has a bee-space at the ends of the section-holders and above, and has ventilation through screened holes.

To prepare for winter I put on one empty super, with a "Hill's device," butter-dish, or the like, over the frames, and place a quilt or thin cushion over all, and leave the space between the cushion and cover empty; the ventilation holes are open except in very cold weather, when I close them with corks.

The hives are placed by a fence, facing south, and straw-banked on the north, with boards or poles projecting over the fence and straw put on them, covering the hives, but not from the sun. I raise the covers sometimes and let it shine in.

I made my own hive eight years ago, and have had fine success with it, although my bee-ambition has been dampened by discouraging advice from friends; kicked, cuffed and trampled on, and poked fun at, I still hold on to it, and got a good supply of honey, for which I am receiving a fair price near home. In addition to my work at home, I handle bees for others, and have had experience with bees of all kinds, and in all kinds of hives, including an old one once owned by Dr. C. C. Miller, for the good Doctor once "rusticated" in this "neck of the woods." I will not say anything about the Doctor's hives, nor bees, if he does not poke too much at

my hive. I am only 27 years old, Doctor, and can reform, if convinced that I am astray.

I hope to be ever for the interests and good treatment of my little friends—the honey-bees.

Weeping Water, Nebr., Nov. 14, 1892.

## Hearing of Bees—Worker in a Queen-Cell.

*Written for the American Bee Journal*

BY FRED BECHLY.

The editor asked the bee-keepers to write about their observations made during last season, so here goes.

I took a virgin queen from a natural swarm, caged her, and laid her in front of a queenless colony; the bees covered the cage at once, trying to get her out. As the queen had been taken from a natural swarm, she kept on piping, the same as if she had been with her own bees; but while the queen was piping, every bee stopped work until she was still, when they would commence to pick at the cage, to stop again at the first note of the queen. This was repeated several times while I watched them. I finally opened the cage and let her run into the hive. This leads me to believe that bees can hear. If they cannot, why was the voice given to the queen?

### WORKER-BEE IN A QUEEN-CELL.

During the summer I reared several queens, by removing the old queen to get cells started. In due time I cut out 8 to 10 fine, large cells, built on the lower edges of the combs. In from 12 to 14 days all hatched but three, that I left them until the 18th day, when I took a knife and cut off the caps. Two contained dead queens, and one a perfect worker-bee, but a little too weak to crawl into the hive. I think it would have hatched in a day or two.

Searsboro, Iowa, Nov. 12, 1892.

## Something Learned from an Experience with Foul Brood.

*Written for the American Bee Journal*

BY RANDOLPH GRADEN.

How often have I smiled at some assertions in the BEE JOURNAL, made by some that easily jump at conclusions; but still I hesitated to correct them, but thought I would leave it to some one better qualified than I am to write.

Some time ago I was on the verge of contracting the theory of the germs of foul brood being in comb foundation unless subjected to a certain high degree of heat. Now with what experience I have had with foul brood, I do not think that the disease can be spread by the use of comb foundation, and no matter if it only has been heated enough to work into foundation; provided, however, that the foundation has not afterwards been exposed to the disease.

But now comes Mr. C. J. Robinson, (see article on page 606) who says:

"Here I record my discovery of what I know to be a fact in Nature, well knowing, too, that none will believe my assertion or doctrine at present." Further he says: "Pure honey, while in comb-cells, never is—never was—charged with foul brood virus."

Now, as I wrote my experience with foul brood in 1889, I know that I have not exaggerated the article, but with what experience I have had since, I could add a great deal more to it. If Mr. Robinson had seen that article, he would have noticed that I claimed that bees in robbing a foul-broody colony, and flying less than one-half mile, did not get the disease, and would now also add that said apiary was since moved to within 15 rods of my own apiary, and whenever anything goes wrong with my neighbor's bees, he comes after me to see what the matter is. Still, I never have seen any, or never heard of any, foul brood among my neighbor's bees.

Oh, no, Mr. R. is not the first one to discover that "pure honey, while in the comb-cells, never is—never was—charged with foul brood virus;" for if it was so charged and contained the germs of disease, why, it would certainly not be pure; and the bees that I referred to in my article (see page 186 of the *AMERICAN BEE JOURNAL* of March 16, 1889) would have become diseased.

Now, for the benefit of those that might be unfortunate enough to get the disease among their bees, I will extend this article a little further, and will say that in the latter part of the season of 1891, my business took me away from home about two months. Upon my return home, I walked through my apiary, which was about the last of October, and I noticed a small cluster of bees—about two teacupfuls—on the branch of a cherry-tree, and as it was quite cool, and very few bees flying, except at two hives the bees were very actively flying, and upon going to the hives I found that one colony was robbing the other, so

that what bees were left in one hive swarmed out and clustered where I found them.

Now let me say right here, that this colony was rather weak in the spring, but they built up quite rapidly during the honey-flow in July, so that I thought they would cast a swarm, and I put a case of sections on the hive, which they entered and built the sections full of comb, and stored some honey, but did not cap it. Along about the first of August they hung out in large clusters during hot spells, but now upon examining the cause of the robbing, I found that they were rotten with foul brood.

Now let us follow the colony that did the robbing, as they were located about 30 feet from the foul-broody hive, and they had carried out the most of the honey from six frames of the Gallup pattern, and, as it looked, took some of the honey from every frame. The hive contained 14 Gallup frames (that is, the foul-broody one), and the robbers were in a ten-frame Simplicity hive, and they wintered and came out strong in the spring.

As my bees cast only about one swarm to every 10 colonies of bees this season, the colony that did the robbing was watched very closely for the disease to appear, but they cast a swarm of bees and stored a case of 28 sections of comb honey, and when I prepared them for winter, they appeared just as healthy as any in the yard.

Mr. R. and others claim that it is the weak colonies that become diseased first; but that is not my experience, as at least two-thirds of the colonies that became diseased in my apiary were my strongest colonies.

In the spring of 1884, my 16 colonies of bees dwindled away until I lost all I had, and upon cleaning out the hives I noticed that the combs and hives had a very bad smell, and that the combs contained a rotten mass of brood, but I thought it was chilled brood that had rotted on account of being left in the hive too long after the bees had died; but I cleaned out the hives as best I could, and rendered the combs into wax, and purchased another colony in a ten-frame Simplicity hive, for which I paid \$10, and started again.

That season they did well, and increased to 4 colonies, which wintered in good condition, and everything went on nicely until about the close of the honey harvest, or July 20th or 25th, when I examined some of my strongest colonies that had not as yet cast a swarm. I



found the same rotten and stinking matter in the center of the brood-chamber, in some of the combs, that I had seen in the hives that I cleaned out the previous spring when I lost all I had. Then, and not until then, did it dawn upon my mind that my bees had the disease called "foul brood," and you may imagine I was sick.

My first decision was to pile all my hives and bees (of which I had then some 7 colonies), and burn them up, including all the fixtures, and plow up the yard, and then begin anew. But upon thinking it all over carefully, and becoming convinced that I would not be safe even by doing so, as I would be just as liable to get the disease among my bees as I was before, as I did not know from whence it came in the first place; so I then and there concluded to fight the disease to the bitter end.

I looked up all the bee-literature I could, and corresponded with some that I knew had some experience with foul brood, one of which was Mr. J. E. Pond, of Massachusetts, who very kindly offered me all the information he could give on the subject of foul brood, for which I hope he will accept thanks even at this late date.

I tried all the remedies I saw recommended, and also some of my own get up, and I am glad to say that I have succeeded, and that I have kept right on increasing my colonies, although I lost quite a few colonies, and would still lose them if I did not notice the disease until it was too late in the season to treat them. Still, I never destroyed any of the fixtures, such as hives and frames, but used them, and have many a colony in hives that were rotten with foul brood some years ago. I have colonies of bees that had the disease some years ago, that are in good condition for winter now. One colony that I now have, has no less than 40 pounds of honey in the hive, and in prime condition, that some years ago was rotten with foul brood early in the season, so that it was all they could do to increase and gather enough stores to winter on; that colony stored 28 sections of comb honey, which was mostly No. 1, and some sections would pass for "extra fancy," which, for this season, in this locality, is a big thing.

I also have evidence to show that a queen reared in a foul-broody colony will live more than one year; that is, as far as the disease is concerned. I also know from what experience I have had, that there is not a particle of danger in

using comb foundation that is made from wax rendered from foul-broody combs, if not afterwards exposed to the disease.

Now, if any of the readers think that it is not the real foul brood that I had to contend with, I would again refer them, for the description of the disease, to my article in the AMERICAN BEE JOURNAL for March 16, 1889, as aforesaid.

In conclusion, I would say that with what experience I have had with the disease, if the time of season was May 1st, and I had no bees, and wanted to get some, and one man offered me 20 colonies of black bees in box-hives for a certain amount, and those bees were in a healthy condition; and another man had 20 colonies of Italian bees in movable frame hives, but the bees were all more or less effected with foul brood, which I could have for the same amount that I was asked for the healthy black bees in box-hives, I should take the foul-broody bees in movable-frame hives in preference to the healthy bees in box-hives, as it would cost me less to rid the bees of the foul brood disease than it would to purchase new hives and fixtures and transfer the bees to the new hives from the box-hives.

Taylor Centre, Mich., Nov. 16, 1892.

### Bees at an Experiment Station— Taking Bees from a House.

Written for the American Bee Journal  
BY PROF. C. L. STRICKLAND.

The bees at the Experiment Station are once more put away to take that peculiar rest. If in a state insuring solid comfort, I am glad the industrious little creatures have a period of rest from their incessant toil. It does my soul good to view them behind those board walls, facing the east, with cushions on just above the brood-nest, for surely with good stores close at hand, they must be at peace. We don't need a bee-cellar here.

The results of bee-work at this Station have been encouraging from the start, and I believe has a promising future, though only two years old. More and more alfalfa is being sowed, and that insures a crop of honey, with reasonable conditions.

#### BEES IN THE SIDE OF A HOUSE.

Just the other day a man called and wanted me to take a colony of bees out

of the side of his house, between the plastering and siding, 8 feet above the ground. The combs were about 30 inches long, by 18 inches wide, and 4 inches deep; being four layers. It was a tough job, for I could not get the bees out of the way—they were cross. They did all this work through a knot-hole one inch in diameter. They had a nice lot of honey. I put the combs into frames, and placed all in a nice hive.

Of all journals that reach my desk, none are grasped and opened with such a degree of pleasure as our great AMERICAN BEE JOURNAL. Long may it live and prosper, is my wish.

Peabody, Kans., Nov. 18, 1892.

### Further Experience with the Punic Bees.

E. R. ROOT.

Some of our friends may be interested in knowing how those Punic bees are behaving of late. We have been watching them narrowly ever since our first reports. Regarding their bad traits, we have nothing to take back, but, on the contrary, we are sure that we did not condemn them any too severely. But among all their naughty habits it would be a little singular if we did not discover at least some partially redeeming quality. Well, we have found one. They are the best defenders of their home against robbers, of any race of bees we have ever known. Indeed, when the robbers are the worst, we find we can pull the cover off their hive and leave their combs exposed for hours at a time; and although the robbers will at first pounce on them fiercely, in a few minutes they begin to find they have "got the wrong pig by the ears," and then they hover about more cautiously. Those "little black devils," as one of the boys calls them, will stand in military array along the edge of the top-bars; and the first robber bee that comes within smelling distance will be met on the wing, and perhaps jerked down between the combs, and that is the last of Mr. Robber, for two or three Punic bees will very soon finish "him" up.

Our experiments were made somewhat late in the season; but we believe it would be safe to move the cover off at any time of the year, if the hive be well shaded. This trait is a very desirable one; but at the same time it is overbalanced by so many bad ones, that, if all Punic bees are as naughty as ours (and

reports seem to show it), bee-keepers having them will soon brimstone them.

We might add, in this connection, that this same skill in defending their home renders them terrific robbers, for no ordinary bee is a match for a Punic in a hand-to-hand combat. One time last summer, when the bees got to robbing, we noticed that there were two Punic bees to one Italian, helping themselves to the ill-gotten gains; and this, notwithstanding there were 200 times as many of the yellow bees as of the black in the apiary. Suppose the situation were reversed, and the honey-house door should be left open—what then?—*Gleanings*.

Medina, Ohio.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

### Bees in Good Condition for Winter.

Bees in this locality go into winter in good condition, with plenty of stores that are well ripened. The honey-flow in this part of the State was good, but bees were too weak in numbers to obtain the best results.

OREL L. HERSHISER.

Buffalo, N. Y., Nov. 26, 1892.

### Not Weary of Bee-Keeping.

I saw some accounts something over two years ago in regard to bee-keeping in North Carolina, so I sold out and went there, but I was disappointed by the misrepresentations. I spent over \$150, and being a man of limited means, one can easily see where it put me.

I have been in the bee-business since the spring of 1874, and have had my ups and downs, but I am not weary of it yet. I am what you would call a specialist. I am also a specialist or scientific bee-hunter; I found 36 bee-trees the past season. Long live the AMERICAN BEE JOURNAL!

G. S. HECKMAN.

Dawkins, Ind., Nov. 24, 1892.

**Results of the Season.**

In June the bees had the appearance of storing lots of honey. They filled the crates ready to seal up. I watched them closely, to see them seal their honey, so I could take off the honey. In a few days I looked at them again, and they were taking it out of the sections and depositing it in the brood-frames. In August they began to gather honey from wild asters and golden-rod, then I got some surplus honey and 4 swarms. I returned the swarms to the parent colonies. The Italian bees are in fine condition.

R. D. DAVIS.

Commercial Point, O., Nov. 20, 1892.

**Jelly-Glass Bee-Feeder.**

The year before last fruit was plentiful, and I bought a case of jelly-glasses. They were delayed in coming, so some were left over unused. This fall I wanted a feeder, so I went to my wife's jelly-glasses, picked out a few with tight-fitting tops, and with a harness-awl I punched it full of holes, filled it with honey, and placed it in the super above the bees, upon two small pieces of wood, so that the bees could pass freely under.

The advantage of this feeder is, that it costs nothing, for you only "borrow of your wife;" next, you can regulate by the number of glasses you put into the super; and, third, being glass, you can see at a glance if they need replenishing.

E. B. ELLIS.

Cooksville, Ills., Nov. 27, 1892.

**Work Done by Bees—Report.**

On page 624, under the above heading, it is estimated that one must make 3,750,000 trips to bring in a pound of honey. Suppose a colony contains 60,000 bees, and 40,000 of them are gathering honey, and they bring in a pound in an hour; for convenience in calculation, say 3,600,000 trips, or 1,000 trips per second. Now suppose a bee crawls two inches per second, and an army of them are coming out two deep to the inch—it would require a hive-entrance 60 inches long to accommodate them, supposing the loaded bees entered by another hole. We have seen bees swarm say 60,000 in five minutes, this would be 200 per second; but according to the 3,750,000 calculation, we must work five times as fast as this, if we ever "get there." Well, if either

I or my bees ever "get there," it is time we began to hustle, I tell you.

There was a calculation somewhat similar to this in the *Canadian Bee Journal* a year or so ago, but I misplaced it, and when I saw what was said on page 624, I hailed it with delight, and showed it to my bee-friends; but you see now I am in doubt about it.

I have had a swarm (not single ones) which would weigh over 60 pounds, six feet long, one foot wide, and from one to six inches deep; but a single swarm which weighs 15 pounds, is not to be "snuffed at," viz.: 60,000 bees, allowing 4,000 to the pound. I have had a colony in a Jones hive (no super on), and 12 frames, that stored 22 pounds in two days, of basswood honey. If I remember, neighbor Cornell got 18 pounds in one day.

I started last spring with about 200 colonies; had 100 supers on with perforated zinc bottoms and drone-combs, with one or two brood-combs from below (I intend putting on four or five next year). I secured 6,000 pounds of extracted honey, and got 7 cents, less  $\frac{1}{2}$  cent for freight and 1 cent for cans, for the light honey; and 3 cents, less  $\frac{1}{2}$  cent for freight and 1 cent for cans, for 1,000 pounds of dark honey.

R. F. WHITESIDE.

Little Britain, Ont., Nov. 21, 1892.

**Plenty of Honey for Winter.**

Although the season has been the nearest to a total failure as far as a crop of honey is concerned that I ever had, I shall brace up, pull down my vest, and try again. So, of course, I must have the "Old Reliable" to help do the bracing. There is one consolation, the bees have plenty of honey to winter on, and I live in hopes of doing better another season.

S. H. MALLORY.

Decatur, Mich., Nov. 25, 1892.

**Doolittle's Queen-Rearing**

book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Webster's Pocket Dictionary we offer as a premium for sending only one new subscriber with \$1.00. It is a splendid Dictionary—and just right for a pocket.





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Wallace Porter Dec93  
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"Bees and Honey"—see page 749

**Honey & Beeswax Market Quotations.**

The following Quotations are for Saturday, December 8th. 1892!

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c., according to what it is—sales chiefly at 8@9c.  
Beeswax—23@25c. R. A. B.

CHICAGO, ILL.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.; dark, 7c.  
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.  
Beeswax—20@23c. C-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.  
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality. 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling a little slow. Prices for best 1-lbs., 17@18c. Extracted selling well from 8@9c.  
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 8@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) low sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—White comb is arriving in sufficient quantities to supply the demand which is gradually slackening off. We quote: Fancy white 1-lbs. 15@16c.; 2-lbs. 12@13c. Fair white 1-lbs. 12@13c.; 2-lbs. 11c. More buckwheat honey on the market than the demand requires and in order to effect sales—prices have to be shaded. 1-lbs. glassed or in paper boxes, 10@10½c.; unglassed, 9@10c.; 2-lbs. 9c. Extracted, white clover and basswood, 8@8½c. Buckwheat, 6@6½c. Southern, 70@75c. per gallon.  
Beeswax—Dull at 25@26c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.; mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.  
Beeswax, 27@28c. H. R. W.

**List of Honey and Beeswax Dealers,**

Most of whom Quote in this Journal.

**Chicago, Ills.**

R. A. BURNETT, 161 South Water Street.  
J. A. LAMON, 44 & 46 South Water Street

**New York, N. Y.**

F. I. SAGE & SON, 183 Reade Street.  
HILDRETH BROS. & SEGELKEN,  
28 & 30 West Broadway

**San Francisco, Calif.**

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

**Minneapolis, Minn.**

STEWART & ELLIOTT, 22 Bridge Square.  
J. A. SHEA & Co., 14 & 16 Hennepin Avenue.

**Kansas City, Mo.**

HAMBLIN & BEARSS, 514 Walnut Street.  
CLEMOMS-MASON COM. Co., 521 Walnut St.

**Albany, N. Y.**

H. R. WRIGHT, 326 & 328 Broadway.

**Hamilton, Ills.**

CHAS. DADANT & SON.

**Cincinnati Ohio.**

C. F. MUTH & SON, cor. Freeman & Central avs

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**Wants or Exchanges.**

Under this heading, Notices of 5 lines, or less, will be inserted at 10 cents per line, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

**TO EXCHANGE**—Pure Tested Young Italians, 3 to 5 bands, 50 cents to \$1.00—for cash, wax or offers. F. C. MORROW,  
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**Convention Notices.**

**THE NORTH AMERICAN Bee-Keepers' Association** will hold its annual Convention in Washington, D. C., Dec. 27, 28, 29, 1892.  
Flint, Mich. W. Z. HUTCHINSON, Sec.

**IOWA.**—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.  
Welton, Iowa.

**COLORADO.**—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.  
Littleton, Colo. H. KNIGHT, Sec.

**MINNESOTA.**—The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday.  
Winona, Minn. A. K. COOPER, Sec.

**VERMONT.**—The eighteenth annual meeting of the Vermont Bee-Keepers' Association will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.  
Barre, Vt. H. W. SCOTT, Sec.

**WISCONSIN.**—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting at Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec. and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.  
Boscobel, Wis. EDWIN PIKE, Pres.

**Be Sure** to read offer on page 749.

**"The Winter Problem** in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for \$1.30. Send to us for a copy.

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